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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/612,743	07/01/2003	Ronald Meade	CAS1.PAU.30	5536

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EXAMINER

DEUBLE, MARK A

ART UNIT	PAPER NUMBER
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3651

DATE MAILED: 12/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/612,743	<b>Applicant(s)</b> MEADE, RONALD	
	<b>Examiner</b> Mark A. Deuble	<b>Art Unit</b> 3651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 11-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7, 9 and 10 is/are rejected.
- 7) ☒ Claim(s) 6 and 8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. ____   |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>11/21/05</u> .  | 6) <input type="checkbox"/> Other: ____                                     |

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election of claims 1-10 in the reply filed on September 19, 2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 11-16 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on September 19, 2005.

### *Drawings*

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the digital medium of claim 2 and the control computer instructions comprising an alarm trip point and a shut down trip point of claim 8 must be shown or the feature(s) canceled from the claim(s). These things may be illustrated schematically in a flow diagram similar to Fig. 4. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the

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drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 7, and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herrera (U.S. Patent No. 6,408,842) in view of Powell (U.S. Patent No. 6,786,325).

Herrera shows an oven 10 having a conveyor 51 therein extending along the elongated axis of the oven. The conveyor has a pair of terminal rollers, each with two ends positioned transaxially with respect to the elongated axis of the oven, and a conveyor belt 120 rotating around an elongate axis defined by the terminal rollers. However, the conveyor of Herrera has no means for aligning the conveyor belt. Powell shows a conveyor belt 103 extending between two terminal rollers 109 and 111. The terminal roller 111 is connected to a means for aligning the conveyor belt elongated axis by adjusting the position of the conveyor belt with respect to the two ends of the terminal roller 1. The means for aligning 300 includes a tensioning assembly 131 connected to the ends of the shaft 121 of the roller 111 through the member 127. A camera

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formed by optical detector 137 is positioned toward one of the ends of the terminal roller to generate a digital image signal corresponding to the conveyor belt's position. A means for controlling the means for aligning 400 receives the signals from the camera and adjusts the means for aligning in response thereto to keep the belt centered along its elongated axis. Powell teaches that this assembly can advantageously be used to prevent belt misalignment by steering the belt on the terminal roller on any general conveyor belt system (col. 3, ln. 1-12). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the oven conveyor of Herrera with the camera and means for aligning and controlling of Powell in order to insure proper belt alignment. When this is done, the resulting apparatus would have all the structure required by claim 1.

In regard to the limitation of claim 7 that the camera is protected by an external housing, it is recognized that no housing is shown on the camera 137 because it is illustrated only schematically. However, some external housing would be an inherent part of such a camera.

In regard to the limitation of claim 9-10 that the means for aligning and the camera focus can be controlled automatically or manually, it should be noted that automating a manual activity or, conversely, making an automated activity manual is not enough to distinguish over the prior art where the manual and automated activities accomplish the same result. See *In re Venner*, 262 F.2d 91, 95, 120 USPQ 193, 194 (CCPA 1958). Furthermore, it should also be noted that the alignment means 300 would be accessible to a user who wished to adjust the position of the alignment means by hand.

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6. Claims 2-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herrera in view of Powell as applied to claim 1, 7, and 9-10 above, and further in view of Schreieder et al. (U.S. Patent No. 6,721,528).

Herrera as modified in view of Powell shows generally all that is required by the claims except for the camera and control specifics required by claims 2-5. This is because Powell does not go into detail about the camera or control means, saying only that there are many such camera and control means known in the art. Schreieder et al. shows a conveyor belt alignment means that is controlled by a control computer 55 that includes a digital medium for storing image data from belt position sensors 50 and 52. In one embodiment, the sensors may be replaced by a detector 61 formed by a CCD line camera. In this case, the camera would send digital signals to the data store in the form of a pixel representation of the conveyor belt position. The camera may periodically take pictures of the belt so that it generates new pixel representations according to a scan interval. These pixel representations are used by the control computer to recognize an offset in the pixel representation of the conveyor belt position and send signals to the means for aligning in order to vary the tension of the conveyor belt at one end of the terminal roller in order to vary the conveyor belt position and correctly align the conveyor belt elongated axis. Schreieder et al. teaches that this camera and control means provides an advantageous way to keep the belt continuously aligned. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use the camera and control means of Schreieder et al. as the specific camera and control in the apparatus of Herrera as modified in view of Powell according to the teachings of Schreieder et al. When this is done, the resulting apparatus would have all the structure required by claims 1-5, 7 and 9-10.

***Allowable Subject Matter***

7. Claims 6 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The cited prior art not discussed above show various belt alignment devices which are similar to that of the present invention.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark A. Deuble whose telephone number is (571) 272-6912. The examiner can normally be reached on Monday through Friday except for alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene O. Crawford can be reached on (571) 272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

md

**MARK A. DEUBLE**  
**PATENT EXAMINER**  
